

### REMARKS

The Office Action of June 2, 2005 has been received and its contents carefully noted. Claims 1-13 are currently pending, of which all stand rejected. By this amendment, claims 14-48 have been cancelled without prejudice or disclaimer and new claims 49-88 have been added to more particularly define and distinguish the claimed inventions from the prior art of record. Furthermore, new claims 49-88 are directed to Applicant's election without traverse of Group I, claims 1-13, filed on March 31, 2005. No new matter has been added. Support for the newly added claims 49-88 may be found throughout the specification at least at the sections indicated in the Table below:

CLAIM NUMBER	LOCATION IN SPECIFICATION
49-51, 53-54, 79-80	Paragraph [0045] at page 9
52, 55, 82	Paragraph [0067] at page 16
56-59	Paragraphs [0045]- [0046] at pages 9-10
60 and 84	Paragraph [0015] at page 4
61-63, 71, and 81	Paragraph [0047] at page 10
64 and 83	Paragraph [0036] at page 7
65 and 87	Paragraph [0014] at page 4
66 and 88	Paragraph [0064] at page 15
67-68 and 85-86	Paragraph [0041] at page 8
69-70	Paragraph [0058] at page 12
72	Paragraph [0070] at page 17
73	Paragraph [0069] at page 17
77-78	Paragraph [0058] at page 12
74-76 and 79	Paragraph [0062] at page 14

Reconsideration and withdrawal of all pending rejections in view of the above amendments and following remarks is respectfully requested.

### ***35 U.S.C. § 102 Rejection***

Claims 1-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,624,886, issued to Natan ET AL., (“Natan”). The Applicants respectfully traverse this rejection for at least the following reasons.

First, the Examiner’s rejection is improper because the Natan reference does not qualify as prior art under 35 U.S.C. § 102(b) because the publication date of this reference is less than one year prior to the February 10, 2003 effective filing date of this application. Specifically, the Natan reference has a publication date of February 13, 2003. This application is entitled to benefit of February 10, 2003 because this application properly claims priority to provisional application Serial No. 60/446,124, filed on February 10, 2003. Nonetheless, claims 1-13 have been cancelled in favor of newly added claims 49-89 thereby rendering the Examiner’s rejection moot. Accordingly, Applicants respectfully request that the rejection over claims 1-13 be withdrawn.

### ***Added Claims***

The Applicants have carefully reviewed the Examiner’s grounds for rejection and have added claims 49-88, of which independent claims 49 and 69 clearly distinguish over the cited prior art of record. The Natan reference is cited for disclosing

a method for producing nanocomposite film, comprising forming a multilayer on glass; wherein the substrate is coated with an organosilane and the multilayer further includes a Au colloid monolayer, and several colloidal layers added using 2-mercaptoethylamine as a bifunctional crosslinker...The Au particles has [sic] a diameter of 2.6 nm. Office Action at page 2.

Nowhere does the Natan reference disclose or suggest each and every element of newly added independent claims 49 and 69. Specifically, for example, newly added independent claim 49 distinguishes over the Natan reference because it is directed to a method for producing a free-standing elastomeric nanocomposite film by, *inter alia*, “removing the elastomeric nanocomposite film from the substrate to form said free-standing elastomeric film.” Additionally, newly added independent claim 70 distinguishes over the Natan reference because it is directed to, *inter alia*, a method for producing a nanocomposite film having an abrasion resistant coating by “contacting the surface of the nanocomposite film with a resin.” Indeed,

nowhere does the Natan reference disclose or suggest such features as required by newly added independent claims 49 and 69.

Moreover, the Natan reference is limited to only producing a nanocomposite film on a glass slide. In particular, Natan states that “suitable examples of glasses include, but are not limited to, SF11 glass slides (Schott Glass Technologies), BK7 microscope slides (Fisher Scientific), and glass cover slips (Fisher Scientific).” *See* Natan at column 5, lines 64-67. Indeed, the claimed inventions have many distinctions and advantages over Natan. For example, the claimed inventions may use many other substrates in addition to glass slides to produce nanocomposite films such as single crystal silicon, polycarbonate, kapton, polyethylene rigid polymer materials, flexible polymer materials, ceramics, metal surfaces, etched surfaces, functionalized surfaces, and non-functionalized surfaces. These materials are specifically recited, *e.g.*, in new claim 60.

Several dependent claims, such as 60, 70, 72-79 are believed to be separately patentable over the prior art of record. Accordingly, Applicants respectfully submit that all newly added claims are patentably distinct from the prior art of record and are in condition for allowance.

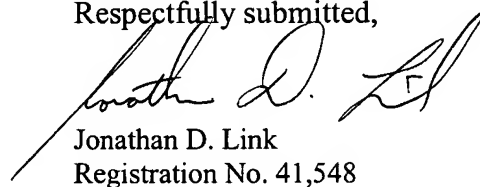
### CONCLUSION

Applicants submit that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated grounds for rejection have been rendered moot. Accordingly, Applicants respectfully submit that all newly added claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is thus respectfully requested to pass the above application to issue.

Should the Examiner feel that there are any issues outstanding after consideration of this response; the Examiner is invited to contact the Applicants' undersigned representative at the number below to expedite prosecution. Prompt and favorable consideration of this Reply is respectfully requested. Applicants respectfully request that a timely Notice of Allowance be issued for this application.

It is not believed that any further extensions of time or fees are required. If extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned for under 37 C.F.R. §1.136(a) and are hereby authorized to be charged to Attorney's Deposit Account No. 23-1951.

Respectfully submitted,



Jonathan D. Link  
Registration No. 41,548

Richard S. Meyer  
Reg. No. 32,541

Date: **November 30, 2005**

McGuire Woods LLP  
1750 Tysons Boulevard, Suite 1800  
McLean, VA 22102-4215  
Telephone: 703-712-5427  
Facsimile: 703-712-5240

JDL/ADT/jmp